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10/785,474

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EXAMINER

KIM, DAVID S

ART UNIT

PAPER NUMBER

2633

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/785,474

Applicant(s)

TOMICH ET AL.

Examiner

David S. Kim

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### Priority

1. Applicant's efforts to comply with the requirements for obtaining the benefit(s) of earlier filed applications are noted and appreciated. Applicant claims priority of prior Application Nos. 09/435,657 , filed on 08 November 1999, and 08/607,964, filed on 29 February 1996.
2. **Regarding 09/435,657**, Applicant amended the specification to include the relationship of the instant application and 09/435,657. Applicant's amendment to the specification indicates that the instant application is a *divisional* application filed under 37 CFR 1.53(b) of 09/435,657. However, the instant application adds and claims additional disclosure *not presented* in the prior applications. Since the instant application names an inventor or inventors named in the prior applications, it may constitute a *continuation-in-part* of the prior applications. Should applicant desire to obtain the benefit of the filing dates of 09/435,657, attention is directed to 35 U.S.C. 120 and 37 CFR 1.78. Presently, the relationship between the instant application and 09/435,657 is unclear. Accordingly, the instant application does not officially receive the benefit of the filing date of 09/435,657. However, assuming that Applicant's response was a bona fide effort to obtain proper priority to 09/435,657, Examiner treats the merits of Applicant's application as though Applicant properly obtained priority to 09/435,657, in the interest of a more compact examination process.

As a remedy, Examiner respectfully suggests removing the additional disclosure in the *instant application that is not presented in the prior applications*. For example, claim 7 and paragraph [067] both disclose subject matter that was not presented in the prior applications: two fiber optic lines that run counter directionally to each other.

As another remedy, Examiner respectfully suggests changing all references and Office records of a *divisional* relationship between the instant application and 09/435,657 to those of a *continuation-in-part* relationship.

3. **Regarding 08/607,964**, Applicant amended the specification to include the relationship of the instant application and 08/607,964. Applicant's amendment to the specification indicates that the instant application is a *divisional* application filed under 37 CFR 1.53(b) of 09/435,657, which is a

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*continuation-in-part* of 08/607,964. However, as noted above, the relationship between the instant application and 09/435,657 is presently unclear. Since 09/435,657 is part of the priority chain to 08/607,964, the same lack of clarity enters the relationship between the instant application and 08/607,964. Accordingly, the instant application does not officially receive the benefit of the filing date of 08/607,964. However, assuming that Applicant's response was a bona fide effort to obtain proper priority to 08/607,964, Examiner treats the merits of Applicant's application as though Applicant properly obtained priority to 08/607,964, in the interest of a more compact examination process. Additionally, Office records do not show a chain of continuity between 09/435,657 and 08/607,964. Examiner respectfully suggests Applicant to contact the Office of Initial Patent Examination (OIPE) at 571-272-4000.

### **Drawings**

4. Applicant's compliance with the objection to Fig. 10 and all the reference characters therein in the previous Office Action (mailed on 20 April 2005) is noted and appreciated. Applicant responded by canceling Fig. 10. Accordingly, the previous objection is withdrawn.

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following limitations must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

(claim 7) the wide-signal bandwidth multi-access channel consists of two parallel fiber optic cables running counter directionally to one another.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the

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filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

**Claim Objections**

6. **Claim 3** is objected to because of the following informalities:

In claim 3, the phrase "a second module" implies "a first module", but no such "first module" exists in the claim. One suggested remedy is to change the dependency of claim 3 to depend on claim 2 instead of depending on claim 1.

Appropriate correction is required.

**Claim Rejections - 35 USC § 112**

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. **Claim 9** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In particular, notice the following limitation:

"wherein the wide-signal bandwidth multi-access channel ***consists of a radio frequency*** data signal path" (emphasis Examiner's).

However, the specification only discloses transmission and reception circuitry for photonic signals on this channel, not radio frequency signals. Accordingly, it is unclear how one of ordinary skill in the art would utilize this channel using **only radio frequency** data signals. That is, in one perspective, undue experimentation would be required to implement transmission and reception circuitry for radio frequency signals in addition to the transmission and reception circuitry for photonic signals. In another perspective, undue experimentation would still be required to implement the disclosed photonic

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transmission and reception circuitry so that this circuitry sends and transmits radio frequency signals. Accordingly, claim 9 contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

**Claim Rejections - 35 USC § 102**

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Amitay**

10. **Claims 1, 5-6, and 8-9** are rejected under 35 U.S.C. 102(b) as being anticipated by Amitay (U.S. Patent No. 4,807,222). Amitay discloses:

**(claim 1)** The channel comprising the plurality of units, each including: the first circuit (photodetector 20 in Fig. 2 or 3) that receives photonic signals, the second circuit (laser 26) that transmits multiplexed photonic signals, the third circuit (any appropriate RBIU), the subsequent set of the units (other RBIUs), and the ring network configuration (abstract).

**(claim 5)** The channel is adapted to allow all units on the ring to simultaneously transmit and receive user data segments (e.g., transmit and receive circuitry in Fig. 2 or 3).

**(claim 6)** The channel consists of a fiber optic cable (fiber bus 14 in Fig. 1).

**(claim 8)** The channel consists of an infrared data signal path (col. 2, l. 44).

**(claim 9)** The channel consists of a radio frequency data signal path (col. 2, l. 44).

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**Shioda et al.**

11. **Claims 1-3 and 5-8** are rejected under 35 U.S.C. 102(e) as being anticipated by Shioda et al. (U.S. Patent No. 5,537,393, hereinafter "Shioda"). Shioda discloses:

**(claim 1)** The channel comprising the plurality of units, each including: the first circuit (optical receiver 15 or 18 in NODE A of Fig. 1) that receives photonic signals, the second circuit (optical transmitter 16 or 17 in NODE A) that transmits multiplexed photonic signals, the third circuit (any other appropriate NODE), the subsequent set of the units (other NODEs), and the ring network configuration (ring in Fig. 1).

**(claim 2)** The first module (module 12 in NODE A of Fig. 1) comprising the first surface (e.g., left side of module 12) aligned with the second circuit (e.g., optical transmitter 16) and another first circuit (e.g., optical receiver 18) aligned with the second surface (e.g., right side of module 12) of the first module.

**(claim 3)** The second module (module 12 in NODE A of Fig. 1) comprising the first surface (e.g., left side of module 12) aligned with the first circuit (e.g., optical receiver 15) and another second circuit (e.g., optical transmitter 17) aligned with the second surface (e.g., right side of module 12) of the second module.

**(claim 5)** The channel is adapted to allow all units on the ring to simultaneously transmit and receive user data segments (e.g., transmit and receive circuitry in Fig. 1).

**(claim 6)** The channel consists of a fiber optic cable (pick a fiber 13 or 14 in Fig. 1).

**(claim 7)** The channel consists of two parallel fiber optic cables running counter directionally to one another (fibers 13 and 14 in Fig. 1).

**(claim 8)** The channel consists of an infrared data signal path (pick a fiber 13 or 14, fiber carries infrared signals).

**Claim Rejections - 35 USC § 103**

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Amitay**

13. **Claims 4 and 10-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Amitay.

**(claim 4)** Amitay does not expressly disclose the optical window, the enclosure, and the bottom plate of claim 4. However, one of ordinary skill in the art would have noticed that a standard housing box for an optical transmitter (e.g., Fig. 2 or 3) of Amitay with an aperture(s) for the optical signals would read on the limitations of claim 4. It is standard practice to house transmission and reception circuitry in such boxes.

**(claims 10-17)** Amitay does not expressly disclose the limitations of claims 10-17: Ethernet packets, Frame Relay packets, FDM signals, On-Off Keying, Frequency-Shift Keying, Quadrature-Phase-Shift Keying, Quadrature-Amplitude-Modulation, and a proprietary modulation. However, all of these limitations are common and well-known techniques for transmitting information signals. There various techniques are readily available to one of ordinary skill in the art to modify Amitay to provide further obvious variations of Amitay.

**Shioda et al.**

14. **Claims 4 and 10-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Shioda.

**(claim 4)** Shioda does not expressly disclose the optical window, the enclosure, and the bottom plate of claim 4. However, one of ordinary skill in the art would have noticed that a standard housing box for an optical node (e.g., NODEs in Fig. 1) of Shioda with an aperture(s) for the optical signals would read on the limitations of claim 4. It is standard practice to house transmission and reception circuitry in such boxes.

**(claims 10-17)** Shioda does not expressly disclose the limitations of claims 10-17: Ethernet packets, Frame Relay packets, FDM signals, On-Off Keying, Frequency-Shift Keying, Quadrature-Phase-Shift Keying, Quadrature-Amplitude-Modulation, and a proprietary modulation. However, all of these



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limitations are common and well-known techniques for transmitting information signals. There various techniques are readily available to one of ordinary skill in the art to modify Shioda to provide further obvious variations of Shioda.

### *Double Patenting*

15. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

### **Tomich et al. ("Tomich068")**

16. **Claims 1-4 and 6** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2-5 of Tomich et al. (U.S. Patent No. 5,983,068, hereinafter "Tomich068").

Claim no. of instant app.	Claim no. of patent	Limitations in instant app.	Corresponding limitations in patent
1	2	multi-access channel plurality of units first circuit second circuit third circuit subsequent set of the units ring network configuration	multi-access channel plurality of roof-top units optical detector circuit optical laser transmit circuit head-end communications circuit subsequent set of roof-top units ring network
2	3	first module	second beamsplitter
3	3	second module	first beamsplitter
4	4	optical window enclosure bottom plate	optical window roof-top enclosure bottom plate
6	5	fiber optic cable	fiber optic cable

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17. **Claims 5, 8, and 10-16** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2-5 of Tomich068. Claims 2-5 of Tomich068 do not expressly disclose the subject matter of claims 5, 8, and 10-16 of the instant application.

Regarding claim 5, the limitation of ring units simultaneously transmitting and receiving user data segments is a common feature of ring network units. Such a feature increases the amount of available time that each unit can transmit and receive data, thus increasing utility efficiency of the multi-access channel.

Regarding claim 8, the limitation of an infrared data signal path is a common feature of a photonic channel. Photonic signals are conventionally in the infrared wavelength range.

Regarding claims 10-16, claims 2-5 of Tomich068 do not expressly disclose the limitations of claims 10-17: Ethernet packets, Frame Relay packets, FDM signals, On-Off Keying, Frequency-Shift Keying, Quadrature-Phase-Shift Keying, Quadrature-Amplitude-Modulation, and a proprietary modulation. However, all of these limitations are common and well-known techniques for transmitting information signals. There various techniques are readily available to one of ordinary skill in the art to modify Tomich068 to provide further obvious variations of Tomich068.

18. **Claim 7** is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2-5 of Tomich068 as applied to claim 1 above, and further in view of Cisco ("Data Optimized Fiber Ring Solutions" from Applicant's IDS filed on 24 February 2004).

**Regarding claim 7**, claims 2-5 of Tomich068 do not expressly disclose:

The wide-signal bandwidth multi-access channel of claim 1, wherein the wide-signal bandwidth multi-access channel consists of two parallel fiber optic cables running counter directionally to one another.

Rather, claims 2-5 of Tomich068 disclose a channel that comprises a single fiber optic cable (fiber optic cable in claim 5). However, such channels that consist of two parallel fiber optic cables running counter directionally to one another are extremely well known in the art. Cisco shows examples of such channels (figure under SONET/SDH Bandwidth Allocation and figure under Dynamic Packet Transport) as part of ring networks. At the time the invention was made, it would have been obvious to a person of

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ordinary skill in the art to modify the channel of claims 2-5 of Tomich068 by adding a parallel fiber optic cable running counter directionally to fiber cable 200 in the ring network of claims 2-5 of Tomich068.

One of ordinary skill in the art would have been motivated to do this since doing so enables a fault recovery mechanism in the event of a node failure or a fiber cut that causes the ring to wrap (Cisco, section SONET/SDH Ring Technology and section Cisco Dynamic Packet Transport), thus providing restored communication around the fault.

19. **Claim 17** is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2-5 of Tomich068.

**Regarding claim 17**, claims 2-5 of Tomich068 do not expressly disclose:

The wide-signal bandwidth multi-access channel of claim 1, wherein the photonic signals use a proprietary modulation.

However, Examiner takes Official Notice that the practice of employing proprietary modulation schemes is extremely well known in the art. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to arrange the photonic signals of claims 2-5 of Tomich068 to use a proprietary modulation. One of ordinary skill in the art would have been motivated to do this for the common purpose of interfacing the channel of claims 2-5 of Tomich068 with other equipment that also uses the same proprietary modulation. Another common motivation is to encourage customers to purchase the channel of claims 2-5 of Tomich068 and all of the equipment that interfaces with the channel of claims 2-5 of Tomich068 all from the same vendor, that is, the owner of the proprietary modulation scheme, thus increasing the revenues of the owner of the proprietary modulation scheme.

**09/435,657**

20. **Claims 1-4** are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 19-22 of copending Application No. 09/435,657.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the invention of the instant application is an obvious variation of the invention of 09/435,657.

Claim no. of	Claim no. of	Limitations in instant app.	Corresponding limitations in patent
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instant app.	patent		
1	19	multi-access channel plurality of units first circuit second circuit third circuit subsequent set of the units ring network configuration	multi-access channel plurality of units optical detector circuit optical laser transmit circuit head-end communications circuit subsequent set of units ring network
2	21	first module	second beamsplitter
3	20	second module	first beamsplitter
4	22	optical window enclosure bottom plate	optical window enclosure bottom plate

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

21. **Claims 5-6, 8, and 10-16** are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 19-22 of copending Application No. 09/435,657. Claims 19-22 of 09/435,657 do not expressly disclose the subject matter of claims 5-6, 8, and 10-16 of the instant application.

Regarding claim 5, the limitation of ring units simultaneously transmitting and receiving user data segments is a common feature of ring network units. Such a feature increases the amount of available time that each unit can transmit and receive data, thus increasing utility efficiency of the multi-access channel.

Regarding claim 6, the limitation of a fiber optic cable is a common feature of a photonic channel. A photonic channel is conventionally a fiber optic cable.

Regarding claim 8, the limitation of an infrared data signal path is a common feature of a photonic channel. Photonic signals are conventionally in the infrared wavelength range.

Regarding claims 10-16, claims 19-22 of 09/435,657 do not expressly disclose the limitations of claims 10-17: Ethernet packets, Frame Relay packets, FDM signals, On-Off Keying, Frequency-Shift Keying, Quadrature-Phase-Shift Keying, Quadrature-Amplitude-Modulation, and a proprietary modulation. However, all of these limitations are common and well-known techniques for transmitting information signals. There various techniques are readily available to one of ordinary skill in the art to

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modify the invention disclosed claims 19-22 of 09/435,657 to provide further obvious variations of the invention disclosed in claims 19-22 of 09/435,657.

This is a provisional obviousness-type double patenting rejection.

22. **Claim 7** is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 19-22 of copending Application No. 09/435,657 as applied to claim 1 above, and further in view of Cisco.

**Regarding claim 7**, claims 19-22 of 09/435,657 do not expressly disclose:

The wide-signal bandwidth multi-access channel of claim 1, wherein the wide-signal bandwidth multi-access channel consists of two parallel fiber optic cables running counter directionally to one another.

Rather, claims 19-22 of 09/435,657 disclose simply a wide-signal bandwidth multi-access channel. However, a fiber optic cable is a common feature of a photonic channel. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to implement the channel of claims 19-22 of 09/435,657 with a fiber optic cable. One of ordinary skill in the art would have been motivated to do this since a photonic channel is conventionally a fiber optic cable.

However, claims 19-22 of 09/435,657 still only discloses a single fiber optic cable (fiber optic cable argument above). However, such channels that consist of two parallel fiber optic cables running counter directionally to one another are extremely well known in the art. Cisco shows examples of such channels (figure under SONET/SDH Bandwidth Allocation and figure under Dynamic Packet Transport) as part of ring networks. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the channel of claims 19-22 of 09/435,657 by adding a parallel fiber optic cable running counter directionally to the fiber cable in the ring network of claims 19-22 of 09/435,657. One of ordinary skill in the art would have been motivated to do this since doing so enables a fault recovery mechanism in the event of a node failure or a fiber cut that causes the ring to wrap (Cisco, section SONET/SDH Ring Technology and section Cisco Dynamic Packet Transport), thus providing restored communication around the fault.

This is a provisional obviousness-type double patenting rejection.

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23. **Claim 17** is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 19-22 of copending Application No. 09/435,657.

**Regarding claim 17**, claims 19-22 of 09/435,657 do not expressly disclose:

The wide-signal bandwidth multi-access channel of claim 1, wherein the photonic signals use a proprietary modulation.

However, Examiner takes Official Notice that the practice of employing proprietary modulation schemes is extremely well known in the art. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to arrange the photonic signals of claims 19-22 of 09/435,657 to use a proprietary modulation. One of ordinary skill in the art would have been motivated to do this for the common purpose of interfacing the channel of claims 19-22 of 09/435,657 with other equipment that also uses the same proprietary modulation. Another common motivation is to encourage customers to purchase the channel of claims 19-22 of 09/435,657 and all of the equipment that interfaces with the channel of claims 19-22 of 09/435,657 all from the same vendor, that is, the owner of the proprietary modulation scheme, thus increasing the revenues of the owner of the proprietary modulation scheme.

This is a provisional obviousness-type double patenting rejection.

#### **Response to Arguments**

24. Applicant's arguments, filed on 25 August 2005, with respect to the 102 and 103 rejections of the claims under Tomicho68 and Tomich et al. (International Publication No. WO 98/53610), have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments (filed on 25 August 2005, p. 6-7, bridging paragraph) are based on a priority claim to related case/patent Tomicho68 (08/607,964), filed on 29 February 1996. Although Applicant's priority claim is still not officially proper, Examiner assumes that Applicant's response was a bona fide effort to obtain proper priority to 08/607,964. Accordingly, Examiner treats the merits of Applicant's application as though Applicant properly obtained priority to 08/607,964, in the interest of a more compact examination process. Notice the new grounds of rejection under the newly applied references of Amitay and Shioda.

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25. Applicant's arguments, filed on 25 August 2005, with respect to the double patenting rejections under Tomicho68 and 09/435,657, have been fully considered but they are not persuasive. Applicant's arguments (filed on 25 August 2005, p. 6-7, bridging paragraph) are based on a priority claim to related case/patent Tomicho68 (08/607,964), filed on 29 February 1996. However, such a priority claim does not overcome the double patenting rejections under Tomicho68 and 09/435,657. That is, double patenting rejections are still proper irrespective of priority dates. Accordingly, Examiner respectfully maintains the standing double patenting rejections.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Kim whose telephone number is 571-272-3033. The examiner can normally be reached on Mon.-Fri. 9 AM to 5 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571-272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DSK

  
**M. R. SEDIGHIAN**  
**PRIMARY EXAMINER**